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PHOTOGRAPHING EGGS OF INSECTS[1]

ALVAH PETERSON

Eggs of insects are excellent subjects for unique and beautiful colored transparencies or photographs. To obtain satisfactory results, one should have access to a camera that will take photographs through a microscope, or possess comparable equipment which will magnify small objects 3 to 25 times or more.

The major problem in photographing a wide variety of eggs is the availableness of subject matter. To obtain eggs one may visit the natural habitats of various insects and collect those that may be present, or one may capture living females and confine them in containers where some or many may deposit eggs.

COLLECTING EGGS.—If one goes to the field to look for eggs much diligent searching is required. When eggs are found, that portion of the plant or object bearing eggs should be cut off and placed in a tin salve box or a similar container where they will not be crushed or dry out before they are photographed, reared or preserved.

In case one does not know the species of the insect that produced the eggs, it is well to take careful notes on their location. Also, one should look for similar eggs that may have hatched. Young larvae or nymphs may be present on or near the hatched eggs. If these are found they should be collected and saved for identification. One should also collect any female insects that may be in the vicinity of the unknown eggs. Under field conditions, one may see female insects, especially butterflies, depositing eggs on foliage and flowers. If one will collect these eggs and the female that deposited them, then one will possess the female for identification. The author has determined eggs of Pieridae and other Lepidoptera in this manner.

A more certain method of identifying unknown eggs is to rear the insects that hatch from them. Be sure to use host tissue similar to that on which the eggs were found. Upon hatching, the first instar larva or nymph can be identified to order and, in many cases, to family. When a larva is nearly full-grown it is possible to determine many individuals to species. One may have to rear many nymphs and some larvae to the adult stage for positive identification.

The identification of immature stages and rearing procedures usually requires experience, time, equipment and frequently an air conditioned environment; consequently, collecting insects for egg deposition may be an easier way to obtain known eggs.

COLLECTING INSECTS FOR EGG DEPOSITION.—A simple and direct way to obtain known eggs is to capture living gravid females found on plants or elsewhere in the field, or at "blacklight" lures at night, or at fermenting baits during the day or at night. Place one or more individuals of a given species in a container prepared for egg deposition. The author has used this method with many species of moths and sucking bugs and a few beetles, flies, mantispids and other insects with considerable success.

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[1] Contribution No. 1, Entomology Department, State Plant Board of Florida, Gainesville, Florida.

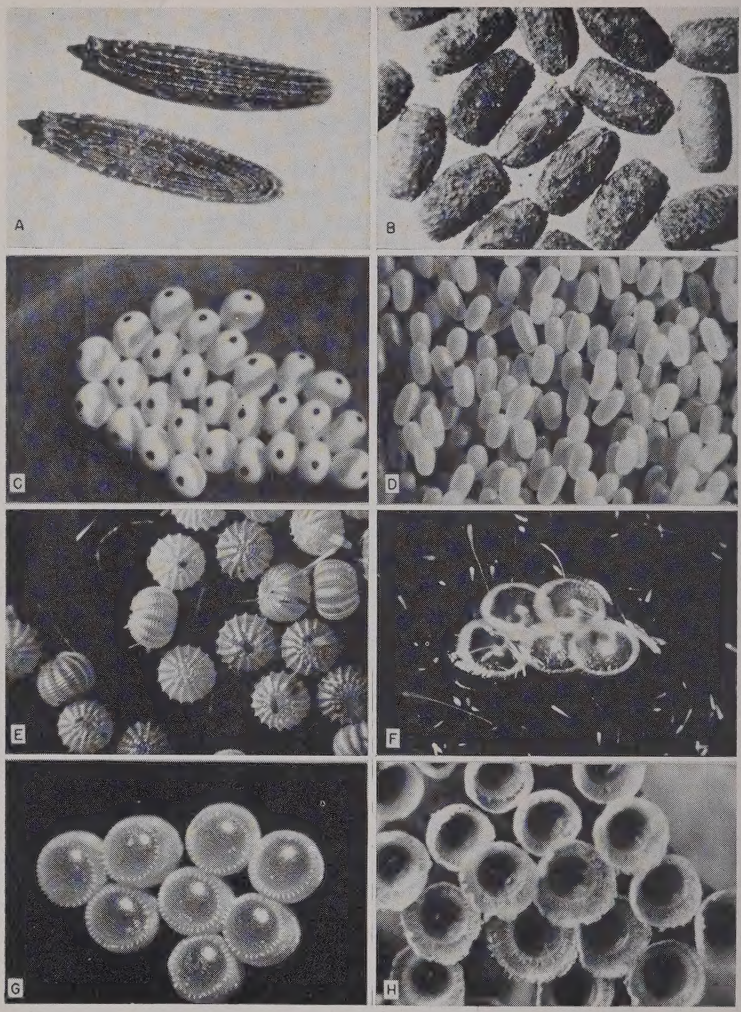

PLATE I

Figure A.—Single, slightly adhesive, near-black eggs of a thread-legged bug. Reduviidae *Emesaya brevipennis* (Say). 20± X.

Figure B.—Single, nonadhesive, near-black eggs of the two-striped walking stick. Phasmatidae, *Anismorpha buprestoides* (Stoll). 5± X.

Figure C.—A cluster of white io moth eggs, each possessing a dark spot and light brown bands. Saturniidae, *Automeris io* (Fab.). 5± X.

Figure D.—Small portion of a mass of near-white, stalked, mantidfly eggs. Mantispidae, *Mantispa interrupta* Say. 20± X.

Figure E.—Single, bright green, nonadhesive eggs of a noctuid showing